

For Research Use Only

PUMA Polyclonal antibody

Catalog Number: 55120-1-AP

Featured Product

70 Publications



Basic Information

Catalog Number:

55120-1-AP

Concentration:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_014417

GeneID (NCBI):

27113

UNIPROT ID:

Q9BXH1

Full Name:

BCL2 binding component 3

Calculated MW:

21 kDa

Observed MW:

18-21 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:3000

IP: 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC: 1:100-1:500

Applications

Tested Applications:

WB, IP, IHC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, zebrafish

Positive Controls:

WB : mouse heart tissue, rat heart tissue

IP : mouse heart tissue,

IHC : human testis tissue, human prostate cancer tissue

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

PUMA, also named as JFY-1 and BBC3, belongs to the Bcl-2 family. It is a critical mediator of p53-dependent and -independent apoptosis induced by a wide variety of stimuli. It serves as a proximal signaling molecule whose expression is regulated by transcription factors in response to these stimuli. PUMA transduces death signals primarily to the mitochondria, where it acts indirectly on the Bcl-2 family members Bax and/or Bak by relieving the inhibition imposed by antiapoptotic members. It directly binds and antagonizes all known antiapoptotic Bcl-2 family members to induce mitochondrial dysfunction and caspase activation. PUMA ablation or inhibition leads to apoptosis deficiency underlying increased risks for cancer development and therapeutic resistance. It is a general sensor of cell death stimuli and a promising drug target for cancer therapy and tissue damage. It is essential mediator of p53-dependent and p53-independent apoptosis (PMID: 19641508). Catalog #55120-1-AP can recognize PUMA alpha 21-24 kDa and PUMA beta 15-18 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Emily Filichia	27619562	Sci Rep	WB
Yang Gao	32932732	Int J Mol Sci	WB
Junwei Du	32891613	Life Sci	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

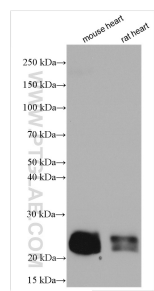
T: 4006900926

E: Proteintech-CN@ptglab.com

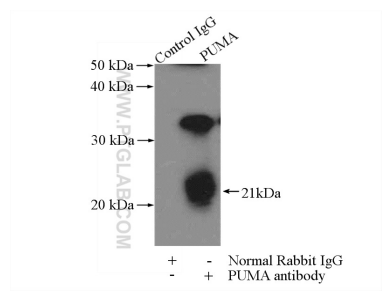
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

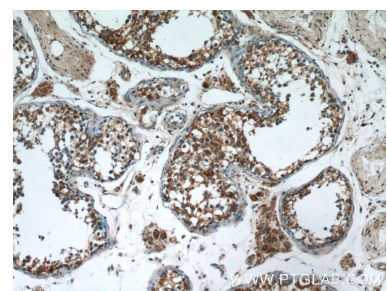
Selected Validation Data



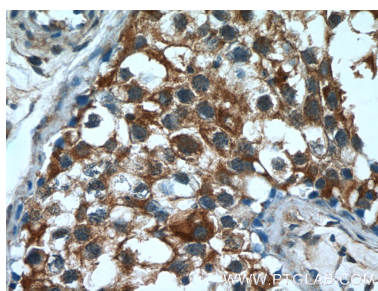
Various lysates were subjected to SDS PAGE followed by western blot with 55120-1-AP (PUMA antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



IP result of anti-PUMA (IP:55120-1-AP, 4ug; Detection:55120-1-AP 1:500) with mouse heart tissue lysate 3200ug.



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 55120-1-AP (PUMA Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 55120-1-AP (PUMA Antibody) at dilution of 1:200 (under 40x lens).